

"In operation, the present system 30 provides an aeroderivative turbine 40 which may be put into service or brought online in a relatively short amount of time. This allows the system 30 to generate electric power, albeit at a somewhat decreased capacity, shortly after the system is started. The exhaust from the AD turbine 40 is ducted to an HRSG 44 to begin steam production for the steam turbine 48. Since a typical steam turbine operating on steam produced in part using waste gas from an IG turbine cannot begin to operate until the IG turbine is spun up, the system 30 of the invention also permits use of the steam turbine at an earlier stage of the power production process, as compared to the prior art systems. The system preferably includes suitable monitoring and control equipment to determine when the HRSGs 36, 44 are producing sufficient steam to start the steam turbines 46, 48. Until that time, the steam generated is trapped within the HRSG or vented to atmosphere. At the same time the AD turbine 40 is started, an industrial gas turbine 31 is also started. These relatively bigger IG turbines 31 require a longer time to reach proper operating conditions, as compared to the AD turbines 40. However, once these IG turbine 31 begins to generate power, their power output can greatly exceed that of the AD turbine 40. The exhaust from the IG turbine 31 is also ducted to a corresponding HRSG 36 to further provide steam to power the steam turbine 46. Once the HRSGs 36, 44 are producing sufficient steam, the steam turbine 46, 48 may be brought online."

"Depending on the level of power output required by the system 30 at any given time, the AD turbine 40 may be shutdown after the IG turbine 31 and/or the steam turbine 46, 48 are online. Preferably, the AD turbine 40 is used to provide relatively quick power output when the system 30 is first started, such as after a maintenance shutdown, during initial system startup, or as required to produce daily peak output to follow typical electric consumer use profiles. In this way, the IG turbine 31 and steam turbines 46, 48 may be operated in a relatively long-term capacity and at near constant output level(s). This decreases wear and subsequent maintenance intervals with regard to these turbines. The AD turbine 40 may then be used to provide variable additional power when demand on the system 30 is high. The AD turbine 40 may also be left online during shutdown of the IG turbine in order to keep the HRSGs 36, 44 in a state of hot stand by for enhanced system start/stop cycling duty capabilities."

"Thus, the system 30 of the present invention is uniquely suited to provide adequate power during high or peak power demand, but does not generate excess power during low demand periods. By using one or more AD turbines to boost system output during the peak periods, the larger IG and steam turbines do not require undesirable fluctuation of their output levels. This near constant, stable output level increases both the stability and longevity of the system as a whole, thereby requiring less maintenance and lowering expenses associated therewith."

From the paragraphs quoted above the AD turbine and the IG turbine are mechanically separate. As described above, the AD turbine and the IG turbine are used to generate electrical

power. The summary of the invention states that, "The present invention relates to a system and facility for generating alternating current electrical power..." on page 3, lines 16-17. Therefore, the AD and the IG turbines are electrically connected since, as detailed in the paragraphs above, the AD turbine allows for quicker output from startup and additional output during high or peak power demand. Based upon the examples provided within the specification, applicant submits that adequate support exists within the specification to support amended Claim 1 and amended claims 2-3, 5-10.

The amendment is pursuant to a telephone interview between Mark Tidwell and the Examiner on September 26, 2002 in which the Examiner suggested that claim language that clarifies that the AD and IG turbines are "mechanically separate, but electrically connected" does not appear to be taught in the referenced prior art, particularly USP 6,189,310. Simply put, the prior art does not teach an overall electric power generation system comprised of the two independent and separate turbines. The amendments to the claims clarify the physical structure of the system in accordance with the interview.

Reconsideration of the application, as amended, and allowance of all of the claims are respectfully requested. In view of the foregoing Amendment, Applicant respectfully submits that Claim 1-3, 5-10 are allowable, and Applicant respectfully requests the issuance of a Notice of Allowance.

Respectfully submitted,



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